

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PAPER NUMBER

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/924,960 08/08/2001 Felix A. Levinzon 1575.2003-001 2004

7590 05/17/2004 EXAMINER

Robert T. Conway, Esq. CHAPMAN JR, JOHN E

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

HAMILTON, BROOK, SMITH & REYNOLDS, P.C. Two Militia Drive Lexington, MA 02421-4799

DATE MAILED: 05/17/2004

ART UNIT

2856

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Comme	09/924,960	LEVINZON, FELIX A
Office Action Summary	Examin r	Art Unit
	John E Chapman	2856
The MAILING DATE of this communication appeared for Reply	ears on the cover sheet with the c	orrespondenc address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.130 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period with Failure to reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	o(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to	ely filed will be considered timely. he mailing date of this communication.
Status		
1) Responsive to communication(s) filed on 11 Ma	roh 2004	
2a) ☐ This action is FINAL . 2b) ☐ This a		
—		
3) Since this application is in condition for allowand closed in accordance with the practice under Ex	ce except for formal matters, pros	secution as to the merits is
	. parte Quayle, 1935 C.D. 11, 45.	3 O.G. 213:
Disposition of Claims		
 4) Claim(s) 1-57 and 59-62 is/are pending in the apole 4a) Of the above claim(s) 14-19,33,34 and 51-55 5) Claim(s) is/are allowed. 6) Claim(s) 1-13,20-32,35-50,56,57 and 59-62 is/are objected to. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or of the apole 4a. 	is/are withdrawn from considerate	ation.
Application Papers		
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accept	oted or b) objected to by the Ex	kaminer
Applicant may not request that any objection to the dr	awing(s) be held in abevance. See:	37 CFR 1 85(a)
Replacement drawing sheet(s) including the correction	n is required if the drawing(s) is obje	cted to See 37 CFR 1 121(d)
11)☐ The oath or declaration is objected to by the Example 11.	miner. Note the attached Office A	Action or form PTO-152
		10.1011 01 101111 1 0-102.
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign particular and all black of a claim for foreign particular and all all black of a claim for foreign particular and all all all all all all all all all al		d) or (f).
1. Certified copies of the priority documents h		
2. Certified copies of the priority documents h	nave been received in Application	ו No
3. Copies of the certified copies of the priority	documents have been received	in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a list of	the certified copies not received.	
Attachment(s)		
) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (P	TO-413)
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Date 5) Notice of Informal Pate 6) Other:	
Patent and Trademark Office	-/ <u></u>	

Art Unit: 2856

DETAILED ACTION

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. The disclosure is objected to because of the following informalities: It is not clear how low pass filter 6 can have a frequency range of 1.5 Hz to 8 kHz (page 7, line 28), since the one-pole low-pass pre-filter limits the frequency range to 460 Hz (page 8, line 3). Hence, it would appear that the upper frequency of the low pass filter is limited to 460 Hz instead of 8 kHz. Appropriate correction is required.
- 3. The amendment filed March 11, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

It is not clear that the low-pass filter comprising the capacitors C1, C2 and C7 together with the resistors R12 and R13 is "active." Note claim 20, which describes a <u>passive</u> low-pass filter circuit, presumably that illustrated in Fig. 2. In addition, it is not clear that the low-pass filter has "a rise beginning at about 500 Hz and having a peak at about 10kHz."

Applicant is required to cancel the new matter in the reply to this Office Action.

4. Claims 13, 32 and 50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was

Art Unit: 2856

not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as filed does not describe filters having an input impedance "greater than 10 Mohm." While the embodiment of Fig. 2 may have suggested an input impedance of approximately 200 Mohm, it would not have reasonably conveyed to one skilled in the art that the input impedance is <u>any</u> value greater than 10 Mohm.

5. Claims 1-13, 20-32, 35-50, 56, 57 and 59-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 23, 37 and 38, the word "means" is preceded by the words "passive circuit" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the words "passive circuit," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). Furthermore, it is not clear what element comprises a "passive circuit" coupling one of the filters 2 or 4 to the transducer 1. Such terminology does not appear in the specification. While buffer 10 couples the high-pass filter 4 to the transducer 1, it comprises an operational amplifier U1, which is an active device. Likewise, an active device J6 couples the low-pass filter comprising the capacitors C1, C2 and C7 together with the resistors R12 and R13 (page 7, lines 26-29) to the transducer.

Art Unit: 2856

Regarding claim 9, it is not clear what element comprises a "high impedance element external from the buffer to provide the output electrical characteristics of the transducer in at least one of the at least two filters." In the specification, only buffer 10 is identified as a high impedance element (page 5, lines 18-21). But buffer 10 is not "external from the buffer." Note also that "characteristics" should be changed to --signal--.

Regarding claim 30, it is not clear what element "approximates" the output impedance of the transducer. Such terminology does not appear in the specification.

Regarding claim 46, it is not clear what element comprises "at least one impedance element external from the buffer that provides the electrical characteristics observed by said circuit input to filter modules including said buffer."

Regarding claims 59-62, it is not clear that the filters "filter the electrical signal independent of a signal generating source external from the transducer." Such description does not appear in the specification. Furthermore, such appears to be a desired result, and it is not clear that any additional structure (or step) is being claimed. The structure (or step) that goes into providing the desired result must be clearly and positively specified.

6. Claims 1, 2, 4, 6, 22-26, 28, 35-41 and 43, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Dunnegan.

Dunnegan discloses in Fig. 7 a system for converting acoustic emissions into electrical signals comprising a transducer 210, a high-pass filter 226 and a low-pass filter 228. There is no "active" circuit element, i.e. amplifier, between the filters 226 and 228 and the transducer 210.

Art Unit: 2856

Regarding claims 4, 26 and 41, amplifiers 234 and 236 may be deemed part of high-pass filter 226 and low-pass filter 228.

Regarding claims 6, 28 and 43, the filters appear to be electrically isolated from each other, i.e., it is not apparent that the signal in one filter affects the signal in the other filter.

- 7. Applicant's arguments filed March 11, 2004 have been fully considered but are moot in view of the new ground(s) of rejection.
- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E Chapman whose telephone number is (571) 272-2191. If

Art Unit: 2856

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John E Chapman Primary Examiner

Art Unit 2856